

**Listing of Claims**

1. (Currently Amended) A tracing method, comprising:

executing a program that includes a plurality of instructions, said plurality of instructions including one or more user trace ~~data~~ write commands, wherein a user trace ~~data~~ write command instructs a processor to write user trace data to a user trace data register, each said user trace ~~data~~ write command indicating a selection by a user of user-defined trace data to be written into said user trace data register, each said user trace write command being a standard write command without trace code information identifying the type of data to be traced;

detecting a write to at least part of said user trace data register; and

in response to said detected write, generating a trace record that includes at least part of the user trace data in said user trace data register;

wherein execution of said plurality of instructions results in tracing a subset of program execution attributes of interest to said user.

2. (Original) The method of claim 1, further comprising outputting said trace record to a trace capture component.

3. (Previously Presented) The method of claim 2, further comprising identifying said outputted trace record as containing user trace data.

4. (Original) The method of claim 1, wherein said user trace data register includes a general processor register value.

5. (Original) The method of claim 1, wherein said user trace data register includes a program variable value.

6. (Original) The method of claim 1, wherein said user trace data register includes debug-related information that is observable during program execution.

7. (Currently Amended) The method of claim 1, wherein said user trace ~~data~~ write command is included in said program prior to execution.

8. (Currently Amended) A tracing system, comprising:

a user trace data register that stores user trace data upon execution of a user trace ~~data~~ write command included among a plurality of instructions, said user trace ~~data~~ write command indicating a selection by a user of user-defined trace data to be written into said user trace data register, said user trace write command being a standard write command without trace code information identifying the type of data to be traced; and

trace generation logic that detects a write to at least part of said user trace data register and generates a trace record that includes at least part of the user trace data in said user trace data register;

wherein execution of said plurality of instructions results in tracing a subset of program execution attributes of interest to said user.

9. (Original) The tracing system of claim 8, wherein said trace generation logic outputs said trace record to a trace capture component.

10. (Previously Presented) The tracing system of claim 9, wherein said trace generation logic further identifies said output trace record as containing user trace data.

11. (Original) The tracing system of claim 8, wherein said user trace data register includes a general processor register value.

12. (Original) The tracing system of claim 8, wherein said user trace data register includes a program variable value.

13. (Original) The tracing system of claim 8, wherein said user trace data register includes debug-related information that is observable during program execution.

14. (Original) The tracing system of claim 8, wherein said user trace ~~data~~ write command is included in said program prior to execution.

15. (Currently Amended) A computer program product comprising:

computer-readable program code for causing a computer to describe a user trace data register that stores user trace data upon execution of a user trace ~~data~~ write command included among a plurality of instructions, said user trace ~~data~~ write command indicating a selection by a user of user-defined trace data to be written into said user trace data register, said user trace write command being a standard write command without trace code information identifying the type of data to be traced; and

computer-readable program code for causing a computer to describe a trace generation logic that detects a write to at least part of said user trace data register and generates a trace record that includes at least part of the user trace data in said user trace data register, wherein execution of said plurality of instructions results in tracing a subset of program execution attributes of interest to said user; and

a computer-usable medium configured to store the computer-readable program codes.

16. (Currently Amended) A method for enabling a computer to generate a tracing system, comprising:

transmitting computer-readable program code to a computer, said computer-readable program code including:

computer-readable program code for causing a computer to describe a user trace data register that stores user trace data upon execution of a user trace ~~data~~ write command included among a plurality of instructions, said user trace ~~data~~ write command indicating a selection by a user of user-defined trace data to be written into said user trace data register, said user trace write command being a standard write command without trace code information identifying the type of data to be traced; and

computer-readable program code for causing a computer to describe a trace generation logic that detects a write to at least part of said user trace data register and generates a trace record that includes at least part of the user trace data in said user trace data register;

wherein execution of said plurality of instructions results in tracing a subset of program execution attributes of interest to said user.

17. (Previously Presented) The method of claim 16, wherein computer-readable program code is transmitted to said computer over the Internet.

18. (Currently Amended) A computer data signal embodied in a transmission medium comprising:

computer-readable program code for causing a computer to describe a user trace data register that stores user trace data upon execution of a user trace ~~data~~ write command included among a plurality of instructions, said user trace ~~data~~ write command indicating a selection by a user of user-defined trace data to be written into said user trace data register, said user trace write command being a standard write command without trace code information identifying the type of data to be traced; and

computer-readable program code for causing a computer to describe a trace generation logic that detects a write to at least part of said user trace data register and generates a trace record that includes at least part of the user trace data in said user trace data register;

wherein execution of said plurality of instructions results in tracing a subset of program execution attributes of interest to said user.